AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to FIG. 2. The sheet, which includes FIG. 2, replaces the original sheet including FIG. 2. FIG. 2 has been amended to remove references 218 a and 218 b, which are not mentioned in the description. No new matter has been added.

REMARKS

In the Official Action mailed on **9 January 2008**, the Examiner reviewed claims 1-39. Examiner rejected the drawings. Examiner rejected claim 8 under 35 U.S.C. § 112. Examiner rejected claims 1, 3, 10, and 12-19 under 35 U.S.C. § 102(e) based on Kagan et al (U.S. Patent No. 7,013,419, hereinafter "Kagan"). Examiner rejected claims 22-39 under 35 U.S.C. § 102(e) based on Pettey et al. (U.S. Patent No. 6,594,712, hereinafter "Pettey"). Examiner rejected claims 2 and 11 under 35 U.S.C. § 103(a) based on Kagan, and InfiniBand Architecture Specification 1.0, hereinafter "InfiniBand Spec"). Examiner rejected claims 4-6 and 20 under 35 U.S.C. § 103(a) based on Kagan, Kagan (U.S. Pub. No. 2002/0165899, hereinafter "Kagan-B"), and Pettey. Examiner rejected claims 7-9 under 35 U.S.C. § 103(a) based on Kagan and Pettey. Examiner rejected claim 21 under 35 U.S.C. § 103(a) based on Kagan, Kagan-B, and Pettey.

Drawing Objections

Examiner objected to the drawings because the drawings did not include a reference number mentioned in the description. More specifically, Examiner avers that "15" in page 19, line 29 of the instant application is not included in the drawings. Applicant respectfully points out that "virtual lane 15" in page 19, line 29 of the instant application refers to a special virtual lane (VL_{15}) which is reserved exclusively for subnet management as defined in the InfiniBand Specification (see page 74, line 27-28 of InfiniBand Architecture Specification Release 1.0 Volume 1). Therefore, Applicant respectfully submits that "15" is not a reference sign and "virtual lane 15" is well known in at art.

Examiner objected to the drawings because the drawings included reference characters not mentioned in the description. More specifically, Examiner avers that elements 218a and 218b are not mentioned in the

specification. Accordingly, Applicant has amended FIG. 2 to remove the unreferenced elements 218a and 218b to overcome the drawing objection. No new matter has been added.

Rejections under 35 U.S.C. § 112

Examiner rejected claim 8 under 35 U.S.C. § 112 as lacking antecedent basis. More specifically, Examiner pointed out that the recited limitation "said forwarding" in claim 8 lacks antecedent basis. Accordingly, Applicant has amended claim 8 to delete the phrase "after said forwarding." No new matter has been added.

Rejections under 35 U.S.C. § 102(e)

Examiner rejected claims 1, 3, 10, and 12-19 under 35 U.S.C. § 102(e) as being anticipated by Kagan. Examiner rejected claims 22-39 under 35 U.S.C. § 102(e) as being anticipated by Pettey. Applicant respectfully disagrees. Neither Kagan nor Petty disclose an entry in a linked list that identifies the first and last packet sequence number (PSN) of the expected responses to the RDMA Read, and/or the PSN of most recently received response, and/or a link to the next entry in the linked list.

Embodiments of the present invention track response to an RDMA read operation by maintaining a linked list for each queue pair (see page 44, ll. 22-27 of the present invention). Each entry in the linked list corresponds to a single RDMA Read operation, and each entry identifies the **first and last PSNs of the expected response to the RDMA request,** and/or the PSN of the most recently received response, and/or a link to the next entry in the linked list (see page 45, ll. 19-24 of the instant application).

Applicant respectfully points out that neither Kagan nor Petty disclose maintaining such a linked list.

Examiner avers that Kagan discloses adding an entry in a linked list wherein said entry identifies a range of sequence numbers associated with expected responses to said first RDMA Read request (see page 4, ll. 7-11 of the Office Action). However, a close examination of the cited text, namely col. 8, ll. 17-28 and col. 9, ll. 61-67 of Kagan, does not render such a conclusion.

Col. 8, ll. 17-28 of Kagan discloses a "gathered list" pointing to the location in memory from which the data in the outgoing message are to be taken (see col. 8, ll. 22-25 of Kagan). Note that the "gathered list" in the Kagan system is different from the linked list in embodiments of the present invention. The entries in the *gathered list* in the Kagan system contain **an address and a count**. In contrast, the entries in the *linked list* in embodiments of the present invention include the **first and last PSNs** of the expected response to the RDMA request, and/or the PSN of the most recently received response, and/or a link to the next entry in the linked list.

On the other hand, Col. 9, ll. 61-67 of Kagan discloses an execution engine that writes the PSN of the packet to the QP context which stores **only the PSN of the last packet**, instead of the first and last PSNs of the expected response to the RDMA request, as taught by the instant application.

Examiner also avers that Petty discloses a linked list, wherein each entry in said linked list includes a range of sequence numbers associated with expected responses to an RDMA Read request (see the last paragraph of page 12, and the first paragraph of page 13 of the Office Action). However, a close examination of the cited text, namely, col. 9, ll. 33-44, col. 18, ll. 57-67, and col. 19, ll. 1-3 of Petty, does not render such a conclusion. Col. 9, ll. 33-44 of Petty discloses an Address Range Register (ARR) which stores information of the DRDMA address range. The ARR in Petty system does not comprise entries that identifies the first and last PSNs of the expected response to the RDMA request, and/or the PSN of the most recently received response, and/or a link to the next entry in the linked

list (see the table in Col. 10 of Petty, which shows the fields in the ARR). Col. 18, line 57-col. 19, line 3 of Petty merely discusses the mapping between a DRDMA Address Range and a packet memory block, where the data is transferred to. Petty does not disclose a linked list entry that comprise the first and last PSNs of the expected response to the RDMA request, and/or the PSN of the most recently received response, and/or a link to the next entry in the linked list.

Accordingly, Applicant has amended claims 1, 12, 13, and 35 to clarify that the entry in the linked list comprises the first and last sequence number that identifies a range of sequence numbers associated with expected responses to said first RDMA Read request, and/or the sequence number of the most recently received response, and/or a link to the next entry of in the linked list. These amendments find support in page 45, ll. 19-24 of the instant application. No new matter has been added.

Hence, Applicant respectfully submits that independent claims 1, 12, 13, and 35 as presently amended are in condition for allowance. Applicant also submits that claims 2-11, which depend upon claim 1, claims 14-34, which depend upon claim 13, and claims 36-39, which depend upon claim 35, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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